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Robert Greene Sterne Edward J. Kessler Jorge A. Goldstein David K.S. Cornwell Robert W. Esmond Iracy-Gene G. Durkin Michael B. Ray Robert E. Sokohl Eric K. Steffe Michael Q. Lee Steven R. Ludwig John M. Covert Linda E. Alcorn Robert C. Millonig Lawrence B. Bugaisky Donald J. Featherstone Michael V. Messinger Judith U. Kim Timothy J. Shea, Jr. Patrick E. Garrett Heidi L. Kraus Edward W. Yee Albert L. Ferro\* Donald R. Banowit Peter A. Jackman Molly A. McCall Teresa U. Medler Jeffrey S. Weaver Kendrick P. Patterson Vincent L. Capuano Eldora Ellison Floyd Thomas C. Fiala Brian J. Del Buono Virgil Lee Beaston Kimberly N. Reddick Theodore A. Wood Elizabeth J. Haanes Joseph S. Ostroff Frank R. Cottingham Christine M. Lhulier Rae Lynn Prengaman Jane Shershenovich\* Lawrence J. Carroll\* George S. Bardmesser Daniel A. Klein\* Jason D. Eisenberg Michael D. Specht Andrea J. Kamage Tracy L. Muller\* LuAnne M. Yuricek\* John J. Figueroa Ann E. Summerfield Tiera S. Coston\*

Aric W. Ledford\*

Registered Patent Agents -Karen R. Markowicz Nancy J. Leith Helene C. Carlson Gaby L. Longsworth Matthew J. Dowd Aaron L. Schwartz Mary B. Tung Katrina Y. Pei Quach Bryan L. Skelton Robert A. Schwartzman Timothy A. Doyle Jennifer R. Mahalingappa Teresa A. Colella Jeffirey S. Lundgren Victoria S. Rutherford Eric D. Hayes

<u>Of Counsel</u> Kenneth C. Bass III Evan R. Smith

\*Admitted only in Maryland \*Admitted only in Virginia •Practice Limited to Federal Agencies

October 18, 2004

WRITER'S DIRECT NUMBER: (202) 772-8609

INTERNET ADDRESS: JGOLD@SKGF.COM

Art Unit To Be Assigned

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Re:

U.S. Utility Patent Application

Application No.: 10/773,440; Filed: February 9, 2004 For: **Method to Detect Prostate Cancer in a Sample** 

Inventors:

FRADET et al.

Our Ref:

1619.0180001/JAG/CMB

Sir:

Transmitted herewith for appropriate action are the following documents:

- 1. Information Disclosure Statement;
- 2. Form PTO-1449 listing sixty-seven (67) cited documents;
- 3. Copies of thirty-two (32) of the cited documents; and
- 4. One (1) return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

Sterne, Kessler, Goldstein & Fox PLLC.: 1100 New York Avenue, NW: Washington, DC 20005: 202.371.2600 f 202.371.2540: www.skgf.com

Commissioner for Patents October 18, 2004 Page 2

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Cynthia M. Bouchez Attorney for Applicants Registration No. 47,438

and Such

JAG/CMB:krh Enclosures

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## N THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Fradet et al.

Appl. No.: 10/773,440

Filed: February 9, 2004

**Method to Detect Prostate** For:

Cancer in a Sample

Confirmation No.: To be assigned

Art Unit:

To be assigned

Examiner:

To be assigned

Atty. Docket: 1619.0180001/JAG/CMB

## **Information Disclosure Statement**

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450 Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

Copies of documents AA1-AK1, AA2-AK2, AA3-AK3 and AA4-AB4 are not provided in accordance with the U.S. Patent and Trademark Office OG notice of August 5, 2003, which states "[t]he Office hereby waives the requirement under 37 C.F.R. § 1.98 (a)(2)(i) for submitting a copy of each cited U.S. patent and each U.S. patent application publication for all U.S. national patent applications filed after June 30, 2003." A copy of each other document is provided.

Applicants have listed publication dates on the attached Form PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior - 2 -

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art, and/or to prove that this information may not be enabling for the teachings purportedly

offered.

This statement should not be construed as a representation that a search has been made,

or that information more material to the examination of the present patent application does not

exist. The Examiner is specifically requested not to rely solely on the material submitted

herewith.

This Information Disclosure Statement is being filed before the mailing date of a first

Office Action on the merits. No statement or fee is required.

It is respectfully requested that the Examiner initial and return a copy of the enclosed

Form PTO-1449, and indicate in the official file wrapper of this patent application that the

documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency,

or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Cynthia M. Bouchez

Attorney for Applicants

Registration No. 47,438

Washington, D.C. 20005-3934

(202) 371-2600

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Form PTO-1449 (Rev.7-80) U.S. Department of Commerce Patent & Trademark Office ATTY.DOCKET NO. 1619.0180001

February 9, 2004

SERIAL NO. 10/773,440

LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)

APPLICANT
Fradet et al.
FILING DATE

GROUP

U.S. PATENT DOCUMENTS

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date
	AA	4,581,333	Apr. 8/86	Kourilsky et al.			
	AB	4,683,195	Jul. 28/87	Mullis et al.			
	AC	4,683,202	Jul. 28/87	Mullis		<u> </u>	
	AD	4,786,600	Nov.22/88	Kramer et al.		1 .	
	AE	4,800,159	Jan. 24/89	Mullis et al.			
	AF	4,965,188	Oct. 23/90	Mullis et al.			<u>.                                    </u>
	AG	5,002,867	Mar. 26/91	Macevicz			·
	AH	5,068,176	Nov. 26/91	Vijg et al.			
	AI	5,112,736	May 12/92	Caldwell et al.			
	AJ	5,118,801	June 2/92	Lizardi			
	AK	5,149,625	Sept. 22/92	Church et al.			

FOREIGN PATENT DOCUMENTS

	Document number	Date	Country	Class	Subclass	Translation	
						Yes	No
AL	EP 0 320 308	Mar. 11/93	EP				
AM	EP 0 747 706	June 8/03	EP			<u> </u>	
AN	WO93/13121	July 8/93	Wo				
AO	WO95/32305	Nov. 30/95	wo				
AP	WO98/02582	Jan. 22/98	wo				

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

		ARNOLD et al. 1989, "Assay Formats Involving Acridinium-Ester-Labeled DNA Probes", Clin. Chem. 35(8):1588-1594, Publ. by Gen-Probe, San Diego, CA
	AR	
		BOOM et al., Mar. 1990, "Rapid and Simple Method for Purification of Nucleic Acids", J.Clin. Microb. 28(3):495-503, Publ. by Am. Society for Microbiology
1	AS	
		BROWN 2001, "A step-by-step guide to non-linear regression analysis of experimental data using a MS Excel spreadsheet", Comp. Methods & Programs in Biomed. 65:191-200, Publ. by Elsevier Science Ireland
	AT	

Examiner Date considered

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 (Rev.7-80) U.S. Department of Commerce Patent & Trademark Office

LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)

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APPLICANT Fradet et al.

FILING DATE GROUP

February 9, 2004

U.S. PATENT DOCUMENTS

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date
	AA	5,202,231	Apr. 13/93	Drmanac et al.		<u> </u>	
	AB	5,219,989	June 15/93	Sonenberg et al.			
	AC	5,283,174	Feb. 1/94	Arnold, Jr. et al.			
	AD	5,312,728	May 17/94	Lizardi et al.			
	AE	5,399,491	Mar. 21/95	Kacian et al.			
	AF	5,422,252	June 6/95	Walker et al.			
<del></del> -	AG	5,503,980	Apr. 2/96	Cantor			
***	AH	5,547,842	Aug. 20/96	Hogan et al.			
	Ai	5,554,516	Sept. 10/96	Kacian et al.			
	AJ	5,585,481	Dec. 17/96	Arnold, Jr. et al.	-		
	AK	5,639,604	June 17/97	Arnold, Jr. et al.			

FOREIGN PATENT DOCUMENTS

		Document number	Date	Country	Class	Subclass	Translation	
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-	AL	WO01/23550	Apr. 5/01	wo			•	
	AM	WO01/44507	June 21/01	Wo				
	AN	WO00/50899	Aug. 31/00	wo				
	AO	WO00/58470	Oct. 5/00	Wo				
	AP	WO98/45420	Oct. 15/98	wo				

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

		BUSSEMAKERS et al., Dec, 1, 1999, "DD3: A New Prostate-specific Gene, Highly Overexpressed in Prostate Cancer", Cancer Research 59:5975-5979, Publ. by Urology Res. Lab, Univ. Hosp. Nijmegen
	AR	
,		DE KOK et al., May 1, 2002, "DD3" A Very Sensitive and Specific Marker to Detect Prostate Tumors", Cancer Research 62:2695-2698, Publ. by Am. Assoc. for Cancer Res., Baltimore, MD
	AS	
		EDERY et al. 1988, "High-level synthesis in Escherichia coll of functional cap-binding eukaryotic initiation factor elf-4E and affinity purfi. using a simplified cap-analog resin", Gene 74:517-52, Publ. by Elsevier
	AT	

Examiner	Date considered
*Examiner: Initial if reference considered, whether or not citation is in co conformance and not considered. Include copy of this form with next co	onformance with MPEP 609; Draw line through citation if not in munication to applicant.

Form PTO-1449 (Rev.7-80) U.S. Department of Commerce Patent & Trademark Office ATTY.DOCKET NO. 1619.0180001

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ii	AA	5,656,207	Aug. 12/97	Woodhead et al.			
	AB	5,658,737	Aug. 19/97	Nelson et al.			
	AC	5,674,682	Oct. 7/97	Croce et al.			
	AD	5,837,832	Nov. 17/98	Chee et al.			
	AE	5,861,242	Jan. 19/99	Chee et al.			
	AF	5,925,517	Jul. 20/99	Tyagi et al.			
	AG	6,037,130	Mar. 14/00	Tyagi et al.			
	АН	6,087,133	Jul. 11/00	Dattagupta et al.			
	AI	6,110,678	Aug. 29/00	Weisburg et al.			
	LA	6,280,952	Aug. 28/01	Weisburg et al.			
	AK	6,479,263	Nov. 12/02	Slawin et al.			

## FOREIGN PATENT DOCUMENTS

	Document number	Date	Country	Class	Subclass	Translation	
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AL							1 (
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AN							
AO							
AP							

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	T	GANDINI et al. 2003, "Is DD3 a New Prostate-specic Gene?", Anticancer Research 23:305-308, Publ. by Depts. Of Exp. Med & Pathology, Univ. La Sapienza, Rome, Italy
	AR	
		GUICHET et al., Feb. 6, 1997, "The nuclear receptor homologue Ftz-F1 and the homeodomain protein Ftz are mutually dependent cofactors", Letters to Nature 385:548-552
•	AS	
		HESSELS et al., July 2003, "DD3 <sup>PCA</sup> -based Molecular Urine Analysis for the Diagnosis of Prostate Cancer", European Urology 44:8-16, Publ. by Elsevier
	AT	

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Date considered

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 U.S. Department of Commerce (Rev.7-80) Patent & Trademark Office

LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)

ATTY.DOCKET NO. 10/773,440

APPLICANT Fradet et al.

FILING DATE GROUP

U.S. PATENT DOCUMENTS

February 9, 2004

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date
ii ii ii a	AA	6,534,273	Mar. 18/03	Weisburg et al.			
	AB	6,551,778	Apr. 22/03	Harvey et al.			·
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OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

KWOH et al., Feb. 1989, "Transcription-based amplification syst. and detection of amplif. human immunodef. virus type 1 with...", Proc.Natl.Acad.Sci.USA 86:1173-1177, Publ. by SIBIA, San Diego, CA

AR

LIZARDI et al. 1988, "Exponential amplifiation of recombinant-RNA hybridization probes ", BioTechnology 6:1197-1202

AS

MALEK et al. 1994, "Nucleic Acid Sequence-Based Amplification (NASBA\*\*)", Methods in Molecular Biology 28:253-260, Publ. by Hmana Press, Totowa, NJ

Examiner	Date considered
Examiner: Initial if reference considered, whether or not citation is in a	conformance with MPEP 609; Draw line through citation if not in ommunication to applicant.

Form PTO-1449 U.S. Department of Commerce (Rev.7-80) Patent & Trademark Office

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U.S. PATENT DOCUMENTS

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OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	MATTEUCCI et al. 1981, "Synthesis of Deoxyoligonucleotides on a Polymer Support", J. Am. Chem. Soc. 103:3185-3191, Publ. by Am. Chem. Society
AR	
 	MILLER et al. 1988, "Oigonucleotide Inhibitors of Gene Expression In Living Cells: New Opportunities in Drug Design", Ann. Reports Med. Chem. 23:295-304, Publ. by Academic Press, Inc.
AS	
	MORVAN et al. 1986, "a-DNA I. Synthesis, characterization by high field <sup>1</sup> H-NMR, and base-pairing properties of the unnatural bexadeoxyribonucleotide", Nucl Acids Res 14(12):5019-5035, IRL Press, Oxford, England
AT	

Examiner	Date considered

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 (Rev.7-80) U.S. Department of Commerce Patent & Trademark Office

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U.S. PATENT DOCUMENTS

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	AJ						
	AK						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

SCHWARTZ et al. 2001, "FTZ-Factor 1 and Fushi tarazu interact via conserved nuclear receptor and coactivator motifs", The EMBO J. 20(3):510-519

AR

TAMIMI et al. March 1998, "DiagnoGene PCA3 reliable NASBA based reagents for detecting PCA3 mRNA, a recently described prostate marker", Proc. Am. Assoc. Cancer Res. Annual 39:234

AS

TYAGI et al. 1995, "Molecular Beacons: Probes that Fluoresce upon Hybridization", Nature Biotchnol. 14:303-308

Examiner	Date considered
*Examiner: Initial if reference considered, whether or not citation is in conformance and not considered. Include copy of this form with next conformance and not considered.	onformance with MPEP 609; Draw line through citation if not in mmunication to applicant.

Form PTO-1449 U.S. Department of Commerce (Rev.7-80) Patent & Trademark Office

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APPLICANT Fradet et al.

FILING DATE February 9, 2004

U.S. PATENT DOCUMENTS

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OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	VERHAEGH et al., Dec. 1, 2000, "Isolation and Characterization of the Promoter of the Human Prostate Cancer-specic DD3 Gene", J. Biol. Chem. 275(48):37496-37503, Publ. by Am Soc for Biochem & Mol Biol
AR	
	WALKER et al. 1992, "Strand displacement amplification-an isothermal, in vitro DNA amplification technique", Nucl. Acids Res. 20(7):1691-1696, Publ. by xford University Press
AS	
	WALKER et al., Jan. 1992, "Isothermal in vitro amplification of DNA by a restriction enzyme/DNA polymerase system", Proc. Natl. Acad. Sci. USA 89:392-396
AT	

Examiner	Date considered
Examiner: Initial if reference considered, whether or not citation is conformance and not considered. Include copy of this form with no	s in conformance with MPEP 609; Draw line through citation if not in ext communication to applicant.

Form PTO-1449 (Rev.7-80) LIST OF REFER (Use s		U.S. Depar Patent	ATTY.DOCKET NO. 1619.0180001		SERIAL NO. 10/773,440			
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